

Title (en)

Ultrasonic motor and ultrasonic apparatus with ultrasonic motor

Title (de)

Ultraschallmotor und mit diesem Ultraschallmotor ausgerüstetes elektronisches Gerät

Title (fr)

Moteur à ultrasons et appareil électronique équipé d'un tel moteur à ultrasons

Publication

**EP 0880185 B1 20040818 (EN)**

Application

**EP 98304108 A 19980522**

Priority

JP 13418097 A 19970523

Abstract (en)

[origin: EP0880185A2] In an ultrasonic motor having a periodically vibrating member vibrated periodically by the application of a high-frequency voltage and a moving body 11b moved by the periodic vibration of the periodically vibrating member, a node supporting/pressurising member 17, which supports a vibration node of the periodically vibrating member and presses the periodically vibrating member on the moving body 11b, or a fitted support member 22, which is fitted at the vibration node of the periodically vibrating member and increases the engagement strength with the periodically vibrating member, is provided, and further a guide member 24 for guiding the movement direction is preferably provided on the moving body 11b, and a movement regulating member 23 is preferably provided to regulate the movement direction of the moving body 11b together with the guide member 24. <IMAGE> <IMAGE>

IPC 1-7

**H01L 41/09**

IPC 8 full level

**H02N 2/00** (2006.01); **H01L 41/09** (2006.01)

CPC (source: EP US)

**H02N 2/004** (2013.01 - EP US); **H02N 2/0055** (2013.01 - EP US); **H02N 2/006** (2013.01 - EP US); **H02N 2/026** (2013.01 - EP US); **H02N 2/103** (2013.01 - EP US)

Citation (examination)

EP 0395298 A2 19901031 - SEIKO INSTR INC [JP]

Cited by

EP1439435A4; DE19945042A1; DE19945042C2; KR100701722B1; CN100403570C; GB2552051A; GB2552051B; GB2571629A; GB2571629B; US6747394B2; WO2004001867A1; US10425019B2; US10804820B2; WO2012078098A1; WO2009056384A1

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